

Subject: Comments on World Trade Center Report  
To: wtc@nist.gov  
From: Mike.Heimowitz@porternovelli.com

Please find attached the American Fire Safety Council's comments on the NIST report. Please contact me if you have a problem opening the attachment.

Mike Heimowitz  
American Fire Safety Council  
(202) 419-3251

(See attached file: NIST Comments 8-3-05.pdf)



NIST Comments 8-3-05.pdf



## AMERICAN FIRE SAFETY COUNCIL

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August 4, 2005

WTC Technical Information Repository  
Attention: Mr. Stephen Cauffman  
National Institute of Standards and Technology  
Stop 8610  
Gaithersburg, MD 20899-8610

Dear Mr. Cauffman:

The American Fire Safety Council (AFSC) is a non-profit organization dedicated to improving fire safety through enhancement of fire codes and standards and promoting responsible use of flame retardants and flame retardant products. AFSC's mission is to save lives and reduce injuries and property damage from fires in the United States; encourage and promote development and adoption of fire safety standards globally; and to serve as a facilitator of collaborative efforts by government, industry, fire safety groups and others to enhance and promote fire safety.

Considering our mission, AFSC welcomes the National Institute of Standards and Technology (NIST) "Final Report of the National Construction Safety Team on the Collapse of the World Trade Center Towers (Draft)." We congratulate NIST for developing this comprehensive, well-researched report and recommendations.

AFSC has reviewed the draft summary report and submits the following comments, specific to the recommendations concerning "Enhanced Fire Resistance of Structures" (Section 9.2.2), "New Methods for Fire Resistance Design of Structures," (Section 9.2.3) and "Improved Active Fire Protection" (Section 9.2.4).

AFSC is very supportive of the need for improved passive fire protection. This includes improved fire protection both for better fire resistance of building construction elements and for better reaction-to-fire performance of furnishings and contents. We firmly believe that active fire protection measures should not be used in isolation of passive fire protection, and that redundancy is always preferable to safety trade-offs.

Passive fire protection and redundancy are particularly important when dealing with occupancies where large numbers of people are potentially being exposed. Thus, high-rise buildings need to be well protected. Passive fire protection is a particularly cost-effective way of dealing with potential fire hazards. Such passive fire protection can be obtained with materials with intrinsically improved fire performance or with materials enhanced by additive or other processes to ensure compliance with the technical requirements.

AFSC believes that the present American process of consensus codes and standards development is conducive to generating good codes and good fire protection. Any failures associated with lack of code compliance should be dealt with by our legal system.

In addition, regulations, codes and standards should be designed to protect the public and the emergency responders from foreseeable problems. However, fire risk assessments should be conducted to ensure that protection measures not be required to handle unusually severe exposures, such as the September 11, 2001 terrorist attacks.

Concerning spray-applied fire resistive materials (SFRM), AFSC believes that technology exists that can be applied in such a way that the protection remains in place for the expected normal use of the construction element to which they are to be applied. This includes the use (and, if necessary, development and marketing) of sprayed fire protection systems that have the adequate adhesion capability to be effective for very long periods. Research by the materials industry should, and will, be able to present solutions to virtually any technical problem that needs to be resolved to address adequate passive fire protection.

In conclusion, AFSC applauds NIST for producing this extensive and important report and pledges to support NIST and other government agencies in finding ways to improve fire safety for the American public.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Mike Heimowitz". The signature is fluid and cursive, with the first name "Mike" being more prominent and the last name "Heimowitz" written in a continuous script.

Mike Heimowitz  
Program Manager  
American Fire Safety Council